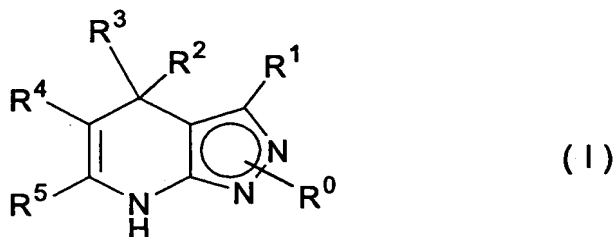


WHAT IS CLAIMED IS:

1. A dihydropyrazolopyridine compound of the formula (I):



wherein

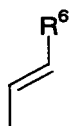
R<sup>0</sup> is hydrogen, alkyl, aralkyl, acyl, cycloalkyl, formyl, haloalkyl, aminoalkyl, alkoxyalkyl, phenoxyalkyl, hydroxyalkyl, aminocarbonyl, alkylthiocarbonyl, carboxyalkyl, cycloalkoxyalkyl, alkylsulfinyl, alkylsulfonyl, phenylsulfonyl, phenylsulfinyl, mercaptoalkyl, alkylthioalkyl, acyloxyacetyl, acyloxyalkyl, phenyl optionally having substituent(s), aromatic heterocyclic group optionally having substituent(s), phenylalkyl optionally having substituent(s), or a group of the formula: -COOR<sup>8</sup> (wherein R<sup>8</sup> is hydrogen, alkyl, aryl optionally having substituent(s) or aralkyl optionally having substituent(s));

R<sup>1</sup> and R<sup>2</sup> are the same or different and each is hydrogen, alkyl, aralkyl, acyl, cycloalkyl, hydroxy, thiol, halogen, amino, formyl, carboxy, cyano, nitro, alkylthio, haloalkyl, aminoalkyl, acylamino, alkoxy, cycloalkoxy, phenoxy, phenylalkoxy, aminoalkoxy, alkoxyalkyl, phenoxyalkyl, hydroxyalkyl, alkoxycarbonyl, aminocarbonyl, alkylthiocarbonyl, carboxyalkyl, cycloalkoxyalkyl, phenylthio, alkylsulfinyl, alkylsulfonyl, phenylsulfonyl, mercaptoalkyl,

alkylthioalkyl, phenyl optionally having  
substituent(s), aromatic heterocyclic group or  
phenylalkyl;

R<sup>3</sup> is

- 5 (1) alkyl or haloalkyl,  
(2) cycloalkyl,  
(3) phenyl optionally having substituent(s),  
(4) aromatic heterocyclic group,  
(5) a group derived from a benzene ring fused with a  
10 saturated or unsaturated 5 or 6 membered carbocyclic  
ring,  
(6) a group derived from a benzene ring fused with a  
saturated or unsaturated 5 to 7 membered carbocyclic  
ring containing 1 to 3 heteroatom(s), or  
15 (7) a group derived from a 5 to 7 membered saturated  
or unsaturated carbocyclic ring containing 1 to 3  
heteroatom(s), which is fused with a benzene ring,  
wherein the groups of (2) to (7) may have one or more  
substituent(s), or  
20 a group selected from the groups represented by the  
following formulas (II) and (III):



(II)



(III)

25 wherein R<sup>6</sup> and R<sup>7</sup> are each phenyl optionally having  
substituent(s) or an aromatic heterocyclic group,  
or R<sup>2</sup> and R<sup>3</sup> in conjunction form a ring optionally containing  
heteroatom(s), wherein the ring may be fused with a  
benzene ring optionally having substituent(s);

$R^4$  is alkoxy carbonyl, alkyl carbonyl, aminocarbonyl, hydrazinocarbonyl, alkylthiocarbonyl, formyl, carbamoyl, alkylthio, phenylthio, alkylsulfinyl, phenylsulfinyl, alkylsulfonyl, phenylsulfonyl, dialkylphosphinyl, dialkylphosphonyl, phenyl optionally having substituent(s), an aromatic heterocyclic group optionally having substituent(s), cyano or nitro; and

$R^5$  is hydrogen, cyano, formyl, alkyl, cycloalkyl, alkoxyalkyl, phenoxyalkyl, dialkoxyalkyl, hydroxyalkyl, haloalkyl, carboxyalkyl, cycloalkoxyalkyl, phenylthio, alkylsulfinyl, alkylsulfonyl, phenylsulfonyl, mercaptoalkyl, alkylthioalkyl, alkoxy carbonyl alkyl, alkoxy carbonyl ethenyl, aryl optionally having substituent(s), an aromatic heterocyclic group or phenylalkyl, or a group derived from a 5 to 7 membered saturated or unsaturated carbocyclic ring containing 1 to 3 heteroatom(s), which is fused with a benzene ring; or

phenylaminoalkyl, acyl, acylalkyl, aminocarbonyl, arylaminocarbonyl, a saturated or unsaturated 4 to 7 membered heterocyclic ring optionally having substituent(s), a saturated 3 to 7 membered carbocyclic ring having substituent(s), alkyl substituted by a saturated or unsaturated 4 to 7 membered ring containing 1 or 2 nitrogen atom(s), which optionally has a substituent, or a group of the formula:  $-(CR^aR^b)_nNR^{11}R^{12}$  wherein n is an integer of 1 to 4,  $R^a$  is hydrogen or alkyl,  $R^b$  is

hydrogen or alkyl,  $R^{11}$  is hydrogen, alkyl,  
alkylsulfonyl, phenylsulfonyl, phenylalkylsulfonyl,  
alkylsulfinyl, phenylsulfinyl, phenylalkylsulfinyl,  
alkoxycarbonyl, phenoxycarbonyl, phenylalkoxycarbonyl,  
5 alkylcarbonyl, phenylcarbonyl or phenylalkylcarbonyl,  
and  $R^{12}$  is hydrogen or alkyl,  
or  $R^4$  and  $R^5$  in conjunction may form a 5 or 6 membered ring  
optionally containing heteroatom(s),  
provided that when  $R^0$ ,  $R^1$  and  $R^2$  are each hydrogen,  $R^4$  is  
10 methoxycarbonyl and  $R^5$  is methyl, then  $R^3$  should not be phenyl,  
2-chlorophenyl, 3-nitrophenyl, 4-carboxyphenyl or 4-  
methoxycarbonylphenyl, and when  $R^5$  is alkyl, then  $R^4$  is not  
alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, phenylsulfinyl,  
phenylsulfonyl, dialkylphosphinyl, dialkylphosphonyl, cyano or  
15 nitro,  
or an optically active form thereof, a pharmaceutically  
acceptable salt thereof or a hydrate thereof.

2. The dihydropyrazolopyridine compound of claim 1, wherein  
20  $R^0$  is hydrogen, alkyl, acyl, cycloalkyl, formyl,  
haloalkyl, aminoalkyl, alkoxyalkyl, phenoxyalkyl,  
hydroxyalkyl, aminocarbonyl, alkylthiocarbonyl,  
carboxyalkyl, cycloalkoxyalkyl, alkylsulfinyl,  
alkylsulfonyl, phenylsulfonyl, mercaptoalkyl,  
25 alkylthioalkyl, acyloxyacetyl, acyloxyalkyl, phenyl  
optionally having substituent(s), aromatic  
heterocyclic group optionally having substituent(s),  
phenylalkyl optionally having substituent(s), or a  
group of the formula:  $-COOR^8$  (wherein  $R^8$  is hydrogen,  
30 alkyl, aryl optionally having substituent(s) or  
aralkyl optionally having substituent(s));  
 $R^1$  and  $R^2$  are the same or different and each is hydrogen, alkyl,  
acyl, cycloalkyl, hydroxy, thiol, halogen, amino,

formyl, carboxy, cyano, nitro, alkylthio, haloalkyl, aminoalkyl, acylamino, alkoxy, cycloalkoxy, phenoxy, phenylalkoxy, aminoalkoxy, alkoxyalkyl, phenoxyalkyl, hydroxyalkyl, alkoxycarbonyl, aminocarbonyl, alkylthiocarbonyl, carboxyalkyl, cycloalkoxyalkyl, phenylthio, alkylsulfinyl, alkylsulfonyl, phenylsulfonyl, mercaptoalkyl, alkylthioalkyl, phenyl optionally having substituent(s), aromatic heterocyclic group or phenylalkyl;

10 R<sup>3</sup>

is

(1) alkyl or haloalkyl,

(2) cycloalkyl,

(3) phenyl optionally having substituent(s),

(4) aromatic heterocyclic group,

15

(5) a group derived from a benzene ring fused with a saturated or unsaturated 5 or 6 membered carbocyclic ring,

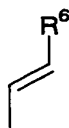
(6) a group derived from a benzene ring fused with a saturated or unsaturated 5 to 7 membered carbocyclic ring containing 1 to 3 heteroatom(s), or

20

(7) a group derived from a 5 to 7 membered saturated or unsaturated carbocyclic ring containing 1 to 3 heteroatom(s), which is fused with a benzene ring, wherein the groups of (2) to (7) may have one or more substituent(s), or

25

a group selected from the groups represented by the following formulas (II) and (III):



(II)



(III)

wherein R<sup>6</sup> and R<sup>7</sup> are each phenyl optionally having  
substituent(s) or an aromatic heterocyclic group,  
or R<sup>2</sup> and R<sup>3</sup> in conjunction form a ring optionally containing  
heteroatom(s), wherein the ring may be fused with a  
benzene ring optionally having substituent(s);  
R<sup>4</sup> is alkoxy carbonyl, aminocarbonyl, hydrazinocarbonyl,  
alkylthiocarbonyl, formyl, carbamoyl, alkylthio,  
phenylthio, alkylsulfinyl, phenylsulfinyl,  
alkylsulfonyl, phenylsulfonyl, dialkylphosphinyl,  
dialkylphosphonyl, cyano or nitro; and  
R<sup>5</sup> is hydrogen, cyano, formyl, alkyl, cycloalkyl,  
alkoxyalkyl, phenoxyalkyl, dialkoxyalkyl,  
hydroxyalkyl, haloalkyl, carboxyalkyl,  
cycloalkoxyalkyl, phenylthio, alkylsulfinyl,  
alkylsulfonyl, phenylsulfonyl, mercaptoalkyl,  
alkylthioalkyl, alkoxy carbonylalkyl,  
alkoxy carbonylethenyl, aryl optionally having  
substituent(s), an aromatic heterocyclic group or  
phenylalkyl, or a group derived from a 5 to 7  
membered saturated or unsaturated carbocyclic ring  
containing 1 to 3 heteroatom(s), which is fused with  
a benzene ring,  
or R<sup>4</sup> and R<sup>5</sup> in conjunction may form a 5 or 6 membered ring  
optionally containing heteroatom(s),  
provided that when R<sup>0</sup>, R<sup>1</sup> and R<sup>2</sup> are each hydrogen, R<sup>4</sup> is  
methoxycarbonyl and R<sup>5</sup> is methyl, then R<sup>3</sup> should not be phenyl,  
2-chlorophenyl, 3-nitrophenyl, 4-carboxyphenyl or 4-  
methoxycarbonylphenyl,  
or an optically active form thereof, a pharmaceutically  
acceptable salt thereof or a hydrate thereof.

3. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>5</sup>

is alkyl having 2 to 8 carbon atoms, cycloalkyl, alkoxyalkyl, phenoxyalkyl, hydroxyalkyl, phenyl optionally having substituent(s), an aromatic heterocyclic group or phenylalkyl, or an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

4. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>1</sup> is hydrogen, alkyl, phenyl optionally having substituent(s), an aromatic heterocyclic group or phenylalkyl, or an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

5. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>2</sup> is hydrogen or alkyl, or an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

6. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>3</sup> is phenyl optionally having 1 to 3 substituent(s), naphthyl, 2,1,3-benzoxadiazol-4-yl or 3,4-dihydro-2H-benzopyran-8-yl, or an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

7. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>4</sup> is alkoxycarbonyl having 2 to 5 carbon atoms, cyano or nitro, or an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

8. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>5</sup> is alkyl having 2 to 4 carbon atoms, cyclopropyl, phenyl, thienyl or hydroxyalkyl, or an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

9. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>2</sup> and R<sup>3</sup> in conjunction form a ring containing sulfur atom and the ring is condensed with a benzene ring optionally having substituent(s), or an optically active form thereof, a  
5 pharmaceutically acceptable salt thereof or a hydrate thereof.

10. The dihydropyrazolopyridine compound of claim 2, wherein R<sup>0</sup> is hydrogen or a group of the formula: -COOR<sup>8</sup> (wherein R<sup>8</sup> is alkyl, aryl optionally having substituent(s) or aralkyl  
10 optionally having substituent(s)), or an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

11. The dihydropyrazolopyridine compound of claim 2, which is  
15 selected from the group consisting of  
(32) ethyl 4,7-dihydro-4-(2-methoxyphenyl)-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
(47) ethyl 4-(2-chloro-3-trifluoromethylphenyl)-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
20 (66) ethyl 4,7-dihydro-4-(naphthalen-1-yl)-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
(73) ethyl 4-(3,4-dihydro-2H-benzopyran-8-yl)-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
(87) ethyl 4-(2-chlorophenyl)-4,7-dihydro-6-(thiophen-2-yl)-  
25 2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
(116) ethyl 4-(2,1,3-benzoxadiazol-4-yl)-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
(122) 4-(2,3-dichlorophenyl)-4,7-dihydro-5-nitro-6-propyl-2H-pyrazolo[3,4-b]pyridine,  
30 (140) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine,  
(147) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-phenyl-2H-pyrazolo[3,4-b]pyridine,



(158) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-phenyl-2H-pyrazolo[3,4-b]pyridine,  
 (171) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-(thiophen-2-yl)-2H-pyrazolo[3,4-b]pyridine,  
 5 (182) ethyl 4-(2-bromo-3-nitrophenyl)-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
 (183) ethyl 4-(2-bromo-3-cyanophenyl)-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
 (189) 4-(2-bromo-3-nitrophenyl)-5-cyano-4,7-dihydro-6-propyl-  
 10 2H-pyrazolo[3,4-b]pyridine,  
 (205) ethyl 2-tert-butoxycarbonyl-4-(2-chlorophenyl)-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
 (240) ethyl 4-(2,1,3-benzoxadiazol-4-yl)-6-ethyl-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine-5-carboxylate,  
 15 (257) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-hydroxymethyl-2H-pyrazolo[3,4-b]pyridine,  
 (260) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-isopropyl-2H-pyrazolo[3,4-b]pyridine,  
 (264) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-  
 20 isopropyl-2H-pyrazolo[3,4-b]pyridine, and  
 (268) 4-(2-bromo-3-cyanophenyl)-5-cyano-6-cyclopropyl-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine,  
 a tautomer, an optically active form thereof, a pharmaceutically acceptable salt thereof or a hydrate thereof.

25

12. The dihydropyrazolopyridine compound of claim 1, wherein  
 $R^0$  is hydrogen, alkyl, aralkyl, acyl, cycloalkyl, formyl, haloalkyl, aminoalkyl, alkoxyalkyl, phenoxyalkyl, hydroxyalkyl, aminocarbonyl, alkylthiocarbonyl,  
 30 carboxyalkyl, cycloalkoxyalkyl, alkylsulfinyl, alkylsulfonyl, phenylsulfonyl, phenylsulfinyl, mercaptoalkyl, alkylthioalkyl, acyloxyacetyl, acyloxyalkyl, phenyl optionally having substituent(s),

aromatic heterocyclic group optionally having  
substituent(s), phenylalkyl optionally having  
substituent(s), or a group of the formula:  $-\text{COOR}^8$   
(wherein  $\text{R}^8$  is hydrogen, alkyl, aryl optionally  
5 having substituent(s) or aralkyl optionally having  
substituent(s));

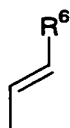
$\text{R}^1$  is hydrogen;

$\text{R}^2$  is hydrogen, alkyl, aralkyl, acyl, cycloalkyl,  
hydroxy, thiol, halogen, amino, formyl, carboxy,  
10 cyano, nitro, alkylthio, haloalkyl, aminoalkyl,  
acylamino, alkoxy, cycloalkoxy, phenoxy, phenylalkoxy,  
aminoalkoxy, alkoxyalkyl, phenoxyalkyl, hydroxyalkyl,  
alkoxycarbonyl, aminocarbonyl, alkylthiocarbonyl,  
carboxyalkyl, cycloalkoxyalkyl, phenylthio,  
15 alkylsulfinyl, alkylsulfonyl, phenylsulfonyl,  
mercaptoalkyl, alkylthioalkyl, phenyl optionally  
having substituent(s), aromatic heterocyclic group or  
phenylalkyl;

$\text{R}^3$  is

20 (1) alkyl or haloalkyl,  
(2) cycloalkyl,  
(3) phenyl optionally having substituent(s),  
(4) aromatic heterocyclic group,  
(5) a group derived from a benzene ring fused with a  
25 saturated or unsaturated 5 or 6 membered carbocyclic  
ring,  
(6) a group derived from a benzene ring fused with a  
saturated or unsaturated 5 to 7 membered carbocyclic  
ring containing 1 to 3 heteroatom(s), or  
30 (7) a group derived from a 5 to 7 membered saturated  
or unsaturated carbocyclic ring containing 1 to 3  
heteroatom(s), which is fused with a benzene ring,  
wherein the groups of (2) to (7) may have one or more

substituent(s), or  
 a group selected from the groups represented by the  
 following formulas (II) and (III):



(II)



(III)

5            wherein  $\text{R}^6$  and  $\text{R}^7$  are each phenyl optionally having  
              substituent(s) or an aromatic heterocyclic group,  
 or  $\text{R}^2$  and  $\text{R}^3$  in conjunction form a ring optionally containing  
              heteroatom(s), wherein the ring may be fused with a  
              benzene ring optionally having substituent(s);

10     $\text{R}^4$     is alkoxycarbonyl,  
              alkylcarbonyl,  
              alkylsulfonyl,  
              alkylsulfinyl,  
              phenylsulfinyl,  
 15           phenylsulfonyl,  
              dialkylphosphinyl,  
              dialkylphosphonyl,  
              phenyl optionally having substituent(s),  
              an aromatic heterocyclic group optionally having  
 20           substituent(s),  
              cyano or  
              nitro; and

$\text{R}^5$     is alkyl,  
                  phenylaminoalkyl,  
 25               acyl,  
                  acylalkyl,  
                  aminocarbonyl,  
                  arylaminocarbonyl,  
                  a saturated or unsaturated 4 to 7 membered

heterocyclic ring optionally having substituent(s),  
a saturated 3 to 7 membered carbocyclic ring having  
substituent(s),  
alkyl substituted by a saturated or unsaturated 4 to  
5 7 membered ring containing 1 or 2 nitrogen atom(s),  
which optionally has a substituent, or  
a group of the formula:  $-(CR^aR^b)_nNR^{11}R^{12}$  wherein n is  
an integer of 1 to 4,  $R^a$  is hydrogen or alkyl,  $R^b$  is  
hydrogen or alkyl,  $R^{11}$  is hydrogen, alkyl,  
10 alkylsulfonyl, phenylsulfonyl, phenylalkylsulfonyl,  
alkylsulfinyl, phenylsulfinyl, phenylalkylsulfinyl,  
alkoxycarbonyl, phenoxycarbonyl, phenylalkoxycarbonyl,  
alkylcarbonyl, phenylcarbonyl or phenylalkylcarbonyl,  
and  $R^{12}$  is hydrogen or alkyl,  
15 provided that when  $R^0$ ,  $R^1$  and  $R^2$  are each hydrogen,  $R^4$  is  
methoxycarbonyl and  $R^5$  is methyl, then  $R^3$  should not be phenyl,  
2-chlorophenyl, 3-nitrophenyl, 4-carboxyphenyl or 4-  
methoxycarbonylphenyl, and when  $R^5$  is alkyl, then  $R^4$  is not  
alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, phenylsulfinyl,  
20 phenylsulfonyl, dialkylphosphinyl, dialkylphosphonyl, cyano or  
nitro,  
or an optically active form thereof, or a pharmaceutically  
acceptable salt thereof.

25 13. The dihydropyrazolopyridine compound of claim 12, wherein  
 $R^4$  is alkoxycarbonyl, alkylcarbonyl, alkylsulfonyl,  
alkylsulfinyl, phenylsulfinyl, phenylsulfonyl,  
dialkylphosphinyl, dialkylphosphonyl, phenyl optionally having  
substituent(s), an aromatic heterocyclic group having  
30 substituent(s), cyano or nitro, and  
 $R^5$  is alkyl, phenylaminoalkyl, acyl, acylalkyl, aminocarbonyl,  
arylaminoalkyl, a saturated or unsaturated 4 to 7 membered  
heterocyclic ring optionally having substituent(s), a

saturated 3 to 7 membered carbocyclic ring having  
substituent(s), alkyl substituted by a saturated or  
unsaturated 4 to 7 membered ring containing 1 or 2 nitrogen  
atom(s), which optionally has a substituent, or a group of the  
5 formula:  $-(CH_2)_nNR^{11}R^{12}$  wherein n is an integer of 1 to 4,  $R^{11}$  is  
hydrogen, alkyl, alkylsulfonyl, phenylsulfonyl,  
phenylalkylsulfonyl, alkylsulfinyl, phenylsulfinyl,  
phenylalkylsulfinyl, alkoxycarbonyl, phenoxy carbonyl,  
phenylalkoxycarbonyl, alkylcarbonyl, phenylcarbonyl or  
10 phenylalkylcarbonyl, and  $R^{12}$  is hydrogen or alkyl,  
or an optically active form thereof, or a pharmaceutically  
acceptable salt thereof.

14. The dihydropyrazolopyridine compound of claim 12 or 13,  
15 wherein  $R^2$  is hydrogen or alkyl, or an optically active form  
thereof, or a pharmaceutically acceptable salt thereof.

15. The dihydropyrazolopyridine compound of claim 12 or 13,  
wherein  $R^3$  is phenyl optionally having 1 to 3 substituent(s),  
20 naphthyl, 2,1,3-benzoxadiazol-4-yl or 3,4-dihydro-2H-  
benzopyran-8-yl, or an optically active form thereof, or a  
pharmaceutically acceptable salt thereof.

16. The dihydropyrazolopyridine compound of claim 12 or 13,  
25 wherein  $R^4$  is alkoxycarbonyl having 2 to 5 carbon atoms,  
alkylcarbonyl having 2 to 5 carbon atoms, alkylsulfonyl having  
1 to 4 carbon atoms, or alkylsulfinyl having 1 to 4 carbon  
atoms, or an optically active form thereof, or a  
pharmaceutically acceptable salt thereof.

30

17. The dihydropyrazolopyridine compound of claim 12 or 13,  
wherein  $R^5$  is a group of the formula:  $-(CH_2)_nNR^{11}R^{12}$  wherein n is  
an integer of 1 to 4,  $R^{11}$  is hydrogen, alkyl or alkoxycarbonyl

and R<sup>12</sup> is hydrogen or alkyl, or an optically active form thereof, or a pharmaceutically acceptable salt thereof.

18. The dihydropyrazolopyridine compound of claim 12 or 13,  
5 wherein R<sup>0</sup> is hydrogen or a group of the formula: -COOR<sup>8</sup>  
(wherein R<sup>8</sup> is alkyl, aryl optionally having substituent(s) or  
aralkyl optionally having substituent(s)), or an optically  
active form thereof, or a pharmaceutically acceptable salt  
thereof.

10

19. The dihydropyrazolopyridine compound of claim 12 or 13,  
which is selected from the group consisting of  
(1002) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-  
(piperidin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
15 (1003) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-(1-  
methypiperidin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
(1011) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-(4-  
methylmorpholin-2-yl)-2H-pyrazolo[3,4-b]pyridine,  
(1014) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-(1-  
20 methyl-1,2,3,6-tetrahydropyridin-4-yl)-2H-pyrazolo[3,4-b]-  
pyridine,  
(1023) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-(4-  
(N,N-dimethylamino) cyclohexyl)-2H-pyrazolo[3,4-b]pyridine,  
(1027) 6-(1-acetyl-1,2,3,6-tetrahydropyridin-4-yl)-4-(2,1,3-  
25 benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-2H-pyrazolo[3,4-b]-  
pyridine,  
(1033) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-(1-  
ethylpiperidin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
(1037) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-  
30 (piperidin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
(1038) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-(1-  
methypiperidin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
(1041) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-(1-

methylpiperidin-3-yl)-2H-pyrazolo[3,4-b]pyridine,  
 (1046) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-(4-methylmorpholin-2-yl)-2H-pyrazolo[3,4-b]pyridine,  
 (1048) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-(1-methyl-1,2,3,6-tetrahydropyridin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
 (1051) 6-(1-acetylpiperidin-4-yl)-4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine,  
 (1052) 6-(1-benzoylpiperidin-4-yl)-4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine,  
 (1053) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-(1-methanesulfonylpiperidin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
 (1059) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-6-(4-oxocyclohexan-1-yl)-2H-pyrazolo[3,4-b]pyridine,  
 (1062) 4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-6-(2-oxocyclohexan-1-yl)-2H-pyrazolo[3,4-b]pyridine,  
 (1063) 6-acetylmethyl-4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine,  
 (1073) 5-cyano-4,7-dihydro-4-(2,3-(methylenedioxy)phenyl)-6-(piperidin-4-yl)-2H-pyrazolo[3,4-b]pyridine,  
 (1075) 4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine-6-carboxylic acid phenylamide,  
 (1078) 4-(2-chlorophenyl)-5-cyano-4,7-dihydro-6-(4-phenylpiperazin-1-yl)methyl-2H-pyrazolo[3,4-b]pyridine,  
 (1081) 6-acetyl-4-(2-bromo-3-cyanophenyl)-5-cyano-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine,  
 (1082) 6-acetyl-4-(2,1,3-benzoxadiazol-4-yl)-5-cyano-4,7-dihydro-2H-pyrazolo[3,4-b]pyridine,  
 (1084) 4-(2-bromo-3-cyanophenyl)-5-(pyridin-2-yl)-4,7-dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine,  
 (1086) 4-(2-chlorophenyl)-5-cyano-4,7-dihydro-6-(pyrrolidin-3-yl)-2H-pyrazolo[3,4-b]pyridine, and  
 (1087) 4-(2,1,3-benzoxadiazol-4-yl)-5-(pyridin-2-yl)-4,7-

5 dihydro-6-propyl-2H-pyrazolo[3,4-b]pyridine,  
a tautomer thereof, an optically active form thereof, or a  
pharmaceutically acceptable salt thereof.

10 20. A medicament comprising a dihydropyrazolopyridine compound  
of claim 1 or 2, an optically active form thereof, a  
pharmaceutically acceptable salt thereof or a hydrate thereof.

21. A medicament comprising a dihydropyrazolopyridine compound  
15 of claim 12 or 13, an optically active form thereof, or a  
pharmaceutically acceptable salt thereof.

22. A pharmaceutical composition comprising a  
dihydropyrazolopyridine compound of claim 1 or 2, an optically  
15 active form thereof, a pharmaceutically acceptable salt  
thereof or a hydrate thereof, and a pharmaceutically  
acceptable additive.

23. A pharmaceutical composition comprising a  
20 dihydropyrazolopyridine compound of claim 12 or 13, an  
optically active form thereof, or a pharmaceutically  
acceptable salt thereof, and a pharmaceutically acceptable  
additive.

25 24. A glycogen synthase kinase-3 beta inhibitor comprising a  
compound selected from the group consisting of a  
dihydropyrazolopyridine compound of claim 1 or 2, an optically  
active form thereof, a pharmaceutically acceptable salt  
thereof and a hydrate thereof.

30 25. A glycogen synthase kinase-3 beta inhibitor comprising a  
compound selected from the group consisting of a  
dihydropyrazolopyridine compound of claim 12 or 13, an



optically active form thereof and a pharmaceutically acceptable salt thereof.

26. The medicament of claim 20 or 21, which is used for  
5 prevention and/or treatment of a disease caused by glycogen synthase kinase-3 beta hyperactivity.

27. The medicament of claim 20 or 21, which is used for prevention and/or treatment of a neurodegenerative disease.

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28. The medicament of claim 27, wherein the disease is selected from the group consisting of Alzheimer's disease, ischemic cerebrovascular disorders, Down's syndrome, cerebral ischemia due to cerebral amyloid angiopathy, progressive  
15 supranuclear paralysis, subacute sclerosing panencephalitic Parkinsonism, postencephalitic Parkinsonism, boxer's encephalopathy, Parkinsonism dementia complex of Guam, Lewy body disease, Pick's disease, corticobasal degeneration, frontotemporal dementia, AIDS encephalopathy, Huntington's  
20 disease and manic-depressive psychosis.

29. The medicament of claim 20 or 21, which is used for prevention and/or treatment of diabetes and diabetic complications.

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30. The medicament of claim 20 or 21, which is used as an immunopotentiator.

31. The medicament of claim 20 or 21, which is used for  
30 prevention and/or treatment of alopecia, breast cancer, non-small cell lung carcinoma, thyroid cancer, T or B-cell leukemia or virus-induced tumors.